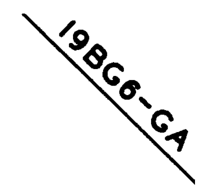




19BG6-GA

BEAM POWER TUBE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	18.9	ac or dc volts
Current	0.3	amp

Direct Interelectrode Capacitances (Approx.):°

Grid No.1 to plate	0.8	μμf
Grid No.1 to cathode & grid No.3, grid No.2, and heater	11	μμf
Plate to cathode & grid No.3, grid No.2, and heater	6	μμf

Characteristics, Class A_1 Amplifier:

Plate Voltage	60	250	volts
Grid-No.2 Voltage	250	250	volts
Grid-No.1 Voltage	0	-15	volts
Mu-Factor, Grid No.2 to Grid No.1	-	8	
Plate Resistance (Approx.)	-	25000	ohms
Transconductance	-	6000	μmhos
Plate Current	180*	75	ma
Grid-No.2 Current	18*	4	ma
Grid-No.1 Voltage (Approx.) for plate current of 1 ma	-	-45	volts

Mechanical:

Mounting Position . . . . Vertical, base up or down, or Horizontal with pins 2 and 7 in vertical plane

Maximum Overall Length . . . . 5"

Seated Length . . . . 4-1/4" ± 3/16"

Maximum Diameter . . . . 1-9/16"

Bulb T-12

Cap .Small (JETEC No.C1-1)

Base . . . . Short Medium-Shell Octal 8-Pin with External Barriers, Style A (JETEC No.B8-110), or Short Medium-Shell Octal 8-Pin with External Barriers, Style B (JETEC No.B8-118)

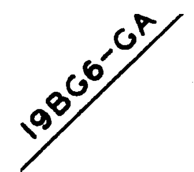
Basing Designation for BOTTOM VIEW 5BT

Pin 1 - No Connection
Pin 2 - Heater
Pin 3 - Cathode, Grid No.3
Pin 4 - Same as Pin 1
Pin 5 - Grid No.1
Pin 6 - Same as Pin 1
Pin 7 - Heater
Pin 8 - Grid No.2
Cap - Plate

° Without external shield.

* These values can be measured by a method involving a recurrent wave form such that the cathode current and grid-No.2 input will be kept within ratings in order to prevent damage to the tube.

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY





19BG6-GA

BEAM POWER TUBE

HORIZONTAL DEFLECTION AMPLIFIER

Maximum Ratings, *Design-Center Values Except as Noted:*

For operation in a 525-line, 30-frame system[□]

DC PLATE VOLTAGE	700	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE (Absolute maximum)[●]	6600[■]	max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1500	max.	volts
DC GRID-No.2 (SCREEN) VOLTAGE	350	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE	300	max.	volts
CATHODE CURRENT:			
Peak	400	max.	ma
Average	110	max.	ma
GRID-No.2 INPUT	3.2	max.	watts
PLATE DISSIPATION[†]	20	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[▲]	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	210	max.	°C

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:			
For grid-resistor-bias operation[†]	0.47	max.	megohm

□ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.

■ Under no circumstances should this absolute value be exceeded.

● The duration of the voltage pulse must not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

† It is essential that the plate dissipation be limited in the event of loss of grid signal. For this purpose, some protective means such as a cathode resistor of suitable value should be employed.

▲ The dc component must not exceed 100 volts.

CURVES

for Type 19BG6-GA are the same as those shown for Type 6BG6-G

TENTATIVE DATA

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